UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,395	02/07/2001	Patrick Nunally	PATRIOT.003A	5499

20995 7590 06/02/2004		EXAMINER
KNOBBE MARTENS OLSON & BEAR LLP		CONNOLLY, MARK A
2040 MAIN STREET		
FOURTEENTH FLOOR	ART UNIT	PAPER NUMBER
IRVINE, CA 92614	2115	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/779,395	NUNALLY, PATRICK
	Examiner	Art Unit	
	Mark Connolly	2115	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 March 2004</u>.
2a)☒ This action is **FINAL**.　　2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-26</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>07 February 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a)☐ All　b)☐ Some * c)☐ None of:
　　　　1.☐ Certified copies of the priority documents have been received.
　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.
　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　　application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-26 have been presented for examination.

2.   Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1, 7 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson, US Pat No 5825674.

5.   Referring to claim 1, Jackson teaches the method of controlling the operating speed of a microprocessor including:

a.   embedding operating speed instructions in a program to be used by a microprocessor executing the program to achieve a level of performance required by the program [col. 3 lines 10-29].

b.   reading the embedded instructions [col. 3 lines 10-29].

c.   adjusting the operating speed of the microprocessor from a first speed to a second speed in accordance with the instructions such that sufficient processing power is provided to achieve a predetermined level of performance in executing the program [col. 3 lines 10-29].

6.   Referring to claim 7, Jackson teaches that the instructions are read by a logic circuit [col.

3 lines 15].

7.   Referring to claim 14, Jackson teaches defining a suggested processor speed [abstract and

col. 3 lines 10-29]. Jackson refers to the instructions as "hint(s)" which is interpreted by the

examiner as suggestions. Because these hints precisely control the rate at which the processor

operates, it is further interpreted by the examiner that the instructions define a suggested

processor speed.

8.   Referring to claim 15, Jackson teaches that the use of the instructions allow the program

to be executed using minimal power while and "without affecting the user's perception of the

overall system performance" [Abstract]. This is interpreted as optimally executing the program

because it executes the program more slowly during periods that require less processing power,

in order to reduce power consumption, while still maintaining a level of performance where the

user's perception of the systems performance is unaffected.

9.   Referring to claim 16, Jackson teaches adjusting the clock speed [col. 3 lines 20-24]

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

11.   Claims 2-4, 10-13 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Jackson.

12.   Referring to claims 2-4, Jackson does not explicitly teach how the program was obtained or even where it was obtained. Is well known in the art that programs can be obtained through downloading. Furthermore, it is well known that programs can be downloaded from sources comprising a remote repository, a network and even the Internet. It would have been obvious to one of ordinary skill in the art to embed the instructions on programs which are downloaded from the above listed sources because it is common practice to execute programs which have been downloaded and if the instructions were embedded into those programs, it would allow the programs to execute using minimal power as taught by Jackson.

13.   Referring to claims 10-12, it is obvious that the instructions in the Jackson system could be embedded by either the creator, distributor or recipient of the program. The creator and distributor are interpreted to be the same because customers or other recipients would not be able to receive the program unless the creator somehow distributed the program. It is first obvious that the creator/distributor could embed the instructions into the program because the creator/distributor designed the program and best know the required speed needed by the program. Secondly, it would be just as obvious that the recipient of the program could embed the instructions because the recipient best knows the capabilities of their computer system and to what extent the computer system could execute the program in terms of how much processing speed and power could be allocated for executing that program.

14.   Referring to claim 13, programs must be stored on a computer readable medium and storing programs on memory cards are well known in the art. Therefore, it is obvious that the programs in the Jackson system could be stored on a memory card.

15.   Referring to claims 24 and 25, these are rejected on the same basis as set forth hereinabove.

16.   Claims 5-6, 8, 18-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson as applied to claims 1-4, 7, 10-16 and 24-25 above, and further in view of Applicants Admitted Prior Art [AAPA].

17.   Referring to claim 5, Jackson does not explicitly teach that the executed program is a Java applet. The AAPA teaches Java applets, which are executed on PCs [page 1 lines 27-29]. Because a Java applet is a program, which is executed by the processor, it would have been obvious to one of ordinary skill in the art to embed the instructions into Java applets because it would allow the program to execute using minimal power as taught by Jackson.

18.   Referring to claim 6, the Jackson-AAPA system teaches embedding instructions into a Java applet. The Java Virtual Machine (JVM) is responsible for reading Java programs and translating the Java code into code that can be recognized and executed by a PC. Therefore, because the instructions are embedded into the Java Applet, it is obvious that the JVM would read the instructions embedded into the Java Applet [page 1 lines 21-29].

19.   Referring to claim 8, it is well known in the art that multimedia applications can be realized as a Java Applet.

20.   Referring to claims 18-20 and 23, these are rejected on the same basis as set forth hereinabove.

21.   Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson as applied to claims 1-4, 7, 10-16 and 24-25 above, and further in view of Flannery US Pat No 5826092.

22.   Referring to claim 9, Jackson teaches embedding instructions which adjusts a processor speed by altering the clock supplied to the processor as described above. Jackson does not teach returning the operating speed to a previous speed once the program completes running. Flannery explicitly teaches executing a program at a fast speed then reducing the operating speed once the program is completed [col. 2 lines 42-45]. It would have been obvious to one of ordinary skill at the time of the invention to modify the Jackson system to define an operating speed required by a program, implement that operating speed during execution, then reduce the operating speed once execution has completed because it would reduce the overall power consumption of the Jackson system as taught by Flannery. Because the programs are executed between idle periods, it is interpreted that the operating speed is returning to a lower operating speed after execution completes.

23.   Referring to claim 21, this is rejected on the same basis as set forth hereinabove.

24.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson as applied to claims 1-4, 7, 10-16 and 24-25 above, and further in view of Watts, Jr [Watts] US Pat No 6158012.

25.   Referring to claim 17, the Jackson is not explicit on teaching that the instructions define a number of instructions per second to be processed. Rather Jackson teaches defining a processor speed by altering the clock supplied to the processor as described above. Watts explicitly

teaches that the number of instructions per second is proportional to the speed of the processor clock [col. 4 lines 52-54]. Watts further teaches that the power consumed by a processor changes with the speed of the processor and with the number of instructions per second to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the instructions in the Jackson system to define a number of instructions per second to be processed, as taught by Watts, because it is just another way of defining a required processor speed and is interpreted as being a different design choice then what is being used in the Jackson system.

26.   Claims 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson and AAPA as applied to claims 1-8, 10-16, 18-20 and 23-25 above, and further in view of Watts, Jr [Watts] US Pat No 6158012.

27.   Referring to claims 22 and 26, the Jackson is not explicit on teaching that the instructions define a number of instructions per second to be processed. Rather Jackson teaches defining a processor speed by altering the clock supplied to the processor as described above. Watts explicitly teaches that the number of instructions per second is proportional to the speed of the processor clock [col. 4 lines 52-54]. Watts further teaches that the power consumed by a processor changes with the speed of the processor and with the number of instructions per second to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the instructions in the Jackson system to define a number of instructions per second to be processed, as taught by Watts, because it is just another way of

defining a required processor speed and is interpreted as being a different design choice then what is being used in the Jackson system.

Conclusion

28.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Connolly whose telephone number is (703) 305-7849. The examiner can normally be reached on M-F 8AM-5PM (except every first Friday).
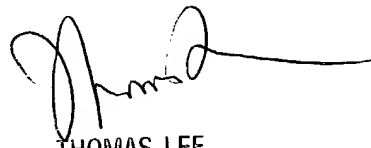
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Connolly
Examiner
Art Unit 2115

mc
May 24, 2004

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100